10

20

30

What is claimed is:

- 1. Process for the preparation of 2-methyl-2-hepten-6-one which comprises reacting 2-methyl-3-buten-2-ol with isopropenyl methyl ether in the presence of hydrogen tris(oxalato)phosphate or hydrogen bis(oxalato)borate.
 - 2. A process as in claim 1 wherein the reaction is carried out in the presence of hydrogen tris(oxalato)phosphate.
 - 3. A process as in claims 1 or 2 wherein the reaction is carried out under elevated pressure.
 - 4. A process as in claim 3 wherein the reaction is carried out at 10⁵ to 20x10⁵ Pa.
- 5. A process as in claim 3 wherein the reaction is carried out at 5×10^5 to about 15×10^5 Pa.
 - 6. A process as in any one of claims 1 to 5 wherein the catalyst is present in an amount to provide a substrate/catalyst ratio of about 1000:1 to about 100:1, based on 2-methyl-3-buten-2-ol as the substrate.
 - 7. A process as in claims 1 or 4 wherein the catalyst is present in amount to provide a substrate/catalyst ratio of about 900:1 to about 300:1, based on 2-methyl-3-buten-2-ol as the substrate.
- 8. A process as in any one of claims 1 to 7 wherein the ratio of 2-methyl-3-buten-2-ol to isopropenyl methyl ether is 1:1 to 1:3.
 - 9. A process as in any one of claims 1 to 7 wherein the ratio of 2-methyl-3-buten-2-ol to isopropenyl methyl ether is 1:1 to 1:2.5.
 - 10. A process as in any one of claims 1 to 9 wherein the reaction is carried out in continuous mode.